Recombinant PAK protein (His tag)

Catalog Number	532937
Species	Drosophila melanogaster
Expression System	E. coli
Accession	Q9VI13
Gene ID	44039
Molecular Weight	Predictes a molecular mass of 34.82 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 37 kDa band.

Product Information

Sequence Region	408-704
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 408-704 aa (Q9VI13) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Drosophila melanogaster Serine/threonine-protein kinase Pak (EC 2.7.11.1) fragment (residues 408-704), encompassing the complete protein kinase domain. This high-purity fragment serves as an essential tool for studying kinase activity, intracellular signaling pathways, and cytoskeleton dynamics in a research setting. Serine/threonine-protein kinase Pak plays a crucial role in intracellular signaling downstream of integrins and receptor-type kinases, regulating cytoskeleton dynamics, cell adhesion, migration, proliferation, apoptosis, mitosis, and vesicle-mediated transport. The full-length protein localizes to the cytoplasm, focal adhesions, axons, and growth cones, where it contributes to proper muscle morphogenesis during embryogenesis and guides photoreceptor axon targeting in eye development. This kinase is recruited to membranes through interactions with dock/dreadlocks proteins when associated with activated receptors, positioning it as a key regulator of cellular architecture and signaling networks.